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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/961,214	09/21/2001	Priscilla Escobar-Bowser	TI-30806	4092

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TEXAS INSTRUMENTS INCORPORATED
P O BOX 655474, M/S 3999
DALLAS, TX 75265

EXAMINER

NGUYEN, HIEP

ART UNIT PAPER NUMBER

2816

DATE MAILED: 09/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/961,214

Applicant(s)

ESCOBAR-BOWSER ET AL.

Examiner

Hiep Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character R3 has been used to designate both the “a first resistor” and the “a second resistor” in figure 1 and 2; transistors in figure 1 have no labels.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recitations “a diode”, “a first transistor”, “a first resistor”, a second resistor”, “a node between the first transistor and the first resistor” in claim 1, “a voltage supply node” in claims 4, 5, 12 and 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction and /or clarification is required.

Regarding claim 1, the recitation “a second transistor having a control node coupled to a control node of the first transistor and coupled to a node **between the first transistor and the first resistor**” is indefinite because it is misdescriptive. According to figure 2 of the present application, assumed that the second transistor is (Q3) then its control node (base) is not coupled to the “a node **between the first transistor (Q4) and the first resistor (R3)**” (i.e., the connection point of R3 and Q4). The recitation “the transistor” on line 4 lacks antecedent basis. The recitation “such that a current in the second transistor is independent of a voltage applied across the diode, the first transistor, and the first resistor” is indefinite because it is misdescriptive.

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Figure 2 shows that the voltage applied across the diode (Q6), the first transistor (Q4), and the first resistor (R3) is (Vcc-Vee) and the voltage applied to the second transistor (Q3) is also (Vcc-Vee). Thus, the current in the second transistor (Q3) is **dependent** of a voltage applied across the diode, the first transistor, and the first resistor” (i.e., Vcc-Vee). Claim 8 is indefinite for the same defectiveness pointed out in the rejection of claim 1.

Regarding claim 4, the recitation” between the second resistor and a voltage supply node” on lines 1-3 is indefinite because it is misdescriptive. The third resistor (R2) is connected to a node between the second transistor (Q3) and the second resistor (R3). It is not clear what the “ a voltage supply node” is. The applicant is requested to point out where it is in the drawing. The same analysis is true for claims 5, 12 and 13.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-11, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by the admitted prior art, figure 1.

Regarding claims 1 and 8, figure 1, element (22), shows a circuit comprising: a diode (a constant voltage drop device); a first transistor coupled in series with the diode; a first resistor coupled in series with the transistor; a second transistor having a control node coupled to a control node of the first transistor and coupled to a node between the first transistor and the first resistor; and a second resistor coupled in series with the second transistor. The recitation “ such that a current in the second transistor is independent of a voltage applied across the diode, the first transistor, and the first resistor” is merely “result” language thus cannot be relied upon to distinguish over the prior art since the prior art meets all of the claimed structure. Note that the apparatus claims, to be patentable over the prior art, must define over the prior art by structure, not the result of that structure.

Regarding claims 2, 3, and 7, the bias generator (20) is coupled to the second transistor and the second resistor. The first branch comprises (Q2) and the second branch comprises (R1), (R4) and (Q1). The first and second transistors are bipolar PNP transistors.

Regarding claim 9, the constant voltage drop device is a (transistor connected) diode.

Regarding claims 10, 11, 14 and 15, the bias generator circuit is element (20) comprising a first branch (Q2) and a second branch (R2, R4, Q1). The first and second transistors are PNP bipolar transistors.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4, 5 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art.

Regarding claim 4, 5 12 and 13, the prior art, figure 1, includes all the limitations of claims 4, 5, 12 and 13 except for the limitation that the first branch includes a resistor. However, it is old and well known in the art that a resistor is a current limiting device; when associated with a transistor it can protect the transistor from being driven by a high current. Therefore, it would have been obvious for those skilled in the art at the time the invention was made to implement a resistor to the first branch of the bias generator circuit for limiting a high current from flowing through transistor (Q2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Hiep Nguyen whose telephone number is (703) 305-0127. The examiner can normally be reached on Monday to Friday from 7:30 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's


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supervisor, Tim Callahan, can be reached on (703) 308-4876. The fax phone number for this Group is (703) 308-6251.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Hiep Nguyen
Examiner
09-12-02



TUAN T. LAM
PRIMARY EXAMINER